

### STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0066893; AI 19640; PER20050001** to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I.           **THE APPLICANT IS:**   Town of Evergreen  
Evergreen Wastewater Treatment Plant  
P.O. Box 85  
Evergreen, LA 71333
  
- II.           **PREPARED BY:**       Jim Bondy
  
- DATE PREPARED:**   March 12, 2007
  
- III.          **PERMIT ACTION:**   reissue LPDES permit LA0066893, AI 19640; PER20050001
  
- LPDES application received: October 24, 2005
  
- LPDES permit effective date: August 1, 2000
- LPDES permit expiration date: July 31, 2005

IV.           **FACILITY INFORMATION:**

- A.       The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Evergreen.
  
- B.       The permit application does not indicate the receipt of industrial wastewater.
  
- C.       The facility is located on C.G. Logan Lane in Evergreen, Avoyelles Parish.
  
- D.       The treatment facility consists of a Sequencing Batch Reactor. Disinfection is by chlorination.
  
- E.       Outfall 001

Discharge Location:   Latitude 30° 56' 49" North  
                                  Longitude 92° 6' 21" West

Description:           treated sanitary wastewater

Design Capacity:       0.037 MGD

Type of Flow Measurement which the facility is currently using:

V-Notch Weir

## Statement of Basis

LA0066893; AI 19640; PER20050001

Page 2

**V. RECEIVING WATERS:**

The discharge is into Bayou Rouge; thence into Bayou Des Glaises in segment 060207 of the Vermilion - Teche Basin.

The designated uses and degree of support for Segment 060207 of the Vermilion - Teche Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Full	Full	Not Supported	N/A	N/A	N/A	N/A

<sup>1/</sup>The designated uses and degree of support for Segment 060207 of the Vermilion - Teche Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 060207 of the Vermilion - Teche Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Statement of Basis

LA0066893; AI 19640; PER20050001

Page 3

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Jim Bondy  
Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

## IX.

### **PROPOSED PERMIT LIMITS:**

Subsegment 060207 of the Vermilion – Teche Basin is not listed on the court ordered 303(d) list of impaired waterbodies. However, subsegment 060906 was previously listed as impaired for organic enrichment / low DO, suspended solids, turbidity, siltation, pesticides, nutrients, and carbofuran, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The *Chatlin Lake Canal / Bayou Dulac and Bayou Des Glaizes Diversion Channel TMDLs for DO and Nutrients* was final on April 19, 2002. The TMDL does not require an upgrade for the Town of Evergreen, therefore limits for CBOD<sub>5</sub>, Ammonia-Nitrogen, and Dissolved Oxygen will remain as previously permitted.

The *TMDL for TSS, Turbidity, and Siltation for the Bayou Teche Watershed* was final on May 2, 2002. As per the TMDL "Point source loads do not represent a significant source of TSS as defined in this TMDL. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. Because the point sources are minor contributors, and dischargers of organic suspended solids from point sources are already addressed by LDEQ through their permitting of point sources to maintain water quality standards for DO, the wasteload allocation for point source contributions were set to zero. This TMDL only addresses the landform contribution of TSS/sediment and does not address the insignificant point source contributions." Therefore, TSS limits will remain as in the previous LPDES permit.

As per the October 2000 LA TMDL Delist (Federal Register Notice: Vol. 66, Num. 66, pages 18087-18089, 4/5/2001), assessment of new data and information shows this segment is meeting water quality standards for turbidity. Therefore, requirements for Turbidity will not be placed in this permit.

The *TMDL for the Pesticide Carbofuran in the Mermentau and Vermilion Teche River Basins* was final on March 21, 2002. There are no known point source discharges of Carbofuran in the Mermentau Basin, and therefore no allocation was given to point sources. There is one point source in the Vermilion-Teche (FMC Corp. LA0064360) but they do not discharge Carbofuran. Likewise no allocation was given to point source discharges in the V-T River Basin.

## Statement of Basis

LA0066893; AI 19640; PER20050001

Page 4

## Final Effluent Limits:

## OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD <sub>5</sub>  April – October November - March	N/A* N/A*	10 mg/l 20mg/l	15 mg/l 30 mg/l	Limits are set in accordance with the <i>Chatlin Lake Canal / Bayou Dulac and Bayou Des Glaises Diversion Channel TMDLs for DO and Nutrients</i> and the previous LPDES permit (set in accordance with the Bayou Boeuf Wasteload Allocation).
TSS  April – October November - March	N/A* N/A*	15 mg/l 20 mg/l	23 mg/l 30 mg/l	Limits are set in accordance with the <i>TMDL for TSS, Turbidity, and Siltation for the Bayou Teche Watershed</i> and the previous LPDES permit.
Ammonia-Nitrogen  April – October November – March	N/A* N/A*	2 mg/l 10 mg/l	4 mg/l 20 mg/l	Limits are set in accordance with the <i>Chatlin Lake Canal / Bayou Dulac and Bayou Des Glaises Diversion Channel TMDLs for DO and Nutrients</i> and the previous LPDES permit (set in accordance with the Bayou Boeuf Wasteload Allocation).
Dissolved Oxygen	N/A	5 mg/l**	N/A	Limits are set in accordance with the <i>Chatlin Lake Canal / Bayou Dulac and Bayou Des Glaises Diversion Channel TMDLs for DO and Nutrients</i> and the previous LPDES permit (set in accordance with the Bayou Boeuf Wasteload Allocation).

\*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD<sub>5</sub> and TSS in terms of concentration.

\*\*This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

## Statement of Basis

LA0066893; AI 19640; PER20050001

Page 5

**Other Effluent Limitations:****1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**X.****PREVIOUS PERMITS:****LPDES Permit LA0066893:**

Effective Date: August 1, 2000

Expiration Date: July 31, 2005

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD <sub>5</sub>				
April-October	10 mg/l	15 mg/l	1/month	Grab
November-March	20 mg/l	30 mg/l	1/month	Grab
TSS				
April-October	15 mg/l	23 mg/l	1/month	Grab
November-March	20 mg/l	30 mg/l	1/month	Grab
Ammonia-Nitrogen				
April-October	2 mg/l	4 mg/l	1/month	Grab
November-March	10 mg/l	20 mg/l	1/month	Grab
Dissolved Oxygen	5 mg/l minimum		1/month	Grab
Fecal Coliform				
Colonies/100 ml	200	400	1/month	Grab
pH	Range (6.0 su – 9.0 su)		2/month	Grab

## Statement of Basis

LA0066893; AI 19640; PER20050001

Page 6

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

A review of the files indicates that the following most recent inspection was performed.

Date – March 31, 2006

Inspector - LDEQ

Findings and/or Violations -

1. pH buffers for 7 and 10 were expired. New buffers have been ordered.
2. Flow calculations could not be compared to recorded flow due to low volume of flow at the time of the inspection.

**B) Compliance and/or Administrative Orders**

A review of the files indicates the following most recent enforcement action administered against this facility:

**LDEQ Issuance:**

Docket # - WE-CN-02-1065

Date Issued - May 28, 2003

Findings of Fact:

1. Facility has numerous permit limit excursions.
2. Facility has no method of disinfection.

Order:

1. Take immediate steps to meet and maintain compliance with permit.
2. Complete construction of new treatment plant (SBR) by 8/1/2003.
3. Facility fully operational and achieving permitted effluent limits by 10/1/03.

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning January 1, 2005 through December 31, 2006 has revealed the following violations:

Month	Parameter	Permit Limit	DMR Reported Value
February 2005	Fecal Coliform, Monthly Avg.	200 colonies/ml	300 colonies/ml
May 2005	TSS, Monthly Avg.	15 mg/l	26 mg/l
	TSS, Weekly Avg.	23 mg/l	26 mg/l
	Ammonia, Monthly Avg.	2 mg/l	2.56 mg/l
July 2005	Fecal Coliform, Monthly Avg.	200 colonies/ml	310 colonies/ml
August 2005	Fecal Coliform, Monthly Avg.	200 colonies/ml	220 colonies/ml
	Ammonia, Monthly Avg.	2 mg/l	12.3 mg/l
	Ammonia, Weekly Avg.	4 mg/l	12.3 mg/l
January 2006	Fecal Coliform, Monthly Avg.	200 colonies/ml	210 colonies/ml
March 2006	Fecal Coliform, Monthly Avg.	200 colonies/ml	500 colonies/ml
	Fecal Coliform, Weekly Avg.	400 colonies/ml	500 colonies/ml
June 2006	Ammonia, Monthly Avg.	2 mg/l	3.24 mg/l
August 2006	Ammonia, Monthly Avg.	2 mg/l	19 mg/l
	Ammonia, Weekly Avg.	4 mg/l	19 mg/l
September 2006	Ammonia, Monthly Avg.	2 mg/l	6.27 mg/l
	Ammonia, Weekly Avg.	4 mg/l	6.27 mg/l
October 2006	Ammonia, Monthly Avg.	2 mg/l	6.32 mg/l
	Ammonia, Weekly Avg.	4 mg/l	6.32 mg/l

## Statement of Basis

LA0066893; AI 19640; PER20050001

Page 7

**XII. ADDITIONAL INFORMATION:**

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.02 and 0.10 MGD.

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	1/week	Measure
CBOD <sub>5</sub>	1/month	Grab
Total Suspended Solids	1/month	Grab
Ammonia-Nitrogen	1/month	Grab
Dissolved Oxygen	1/month	Grab
Fecal Coliform Bacteria	1/month	Grab
pH	1/month	Grab

**Pretreatment Requirements**

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

**XIII TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

**XIV REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Statement of Basis

LA0066893; AI 19640; PER20050001

Page 8

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Evergreen, Evergreen Wastewater Treatment Plant, October 24, 2005.